

**STATISTICS: REFLECTIONS ON THE PAST AND VISIONS FOR THE
FUTURE**

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AFOSR Grant No. F49620-00-1-0087

January 1, 2000–November 30, 2000.

20010402 088

REPORT DOCUMENTATION PAGE

AFRL-SR-BL-TR-01-

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for review maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden e including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Infor Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO

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1. REPORT DATE (DD-MM-YYYY) 26-02-2001		2. REPORT TYPE FINAL		3. DATES COVERED (From - To) 01 Jan 00- 30 Nov 00	
4. TITLE AND SUBTITLE STATISTICS: REFLECTIONS ON THE PAST AND VISIONS FOR THE FUTURE				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER F49620-00-1-0087	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Dr. Nandini Kannan				5d. PROJECT NUMBER	
				5e. TASK NUMBER 2304/EV	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) University of Texas at San Antonio 6900 N Loop 1604 West San Antonio, TX 78249				8. PERFORMING ORGANIZATION REPORT NUMBER CAGE Code 7M065	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) AFOSR/ NM 801 N. Randolph Street Room 732, Arlington Virginia 22203-				10. SPONSOR/MONITOR'S ACRONYM(S) AFOSR/ NM	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release, distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT An International Conference "Statistics: Reflections on the Past and Visions for the Future" was held March 16-19, 2000 at the University of Texas at San Antonio. The primary focus of the conference was to highlight the changing face of statistical research and recognize the contributions of the eminent statistician Professor C. R. Rao. The conference attracted more than 200 participants. There were Plenary and Invited sessions on a variety of topics in Statistical Theory and Applications including Multivariate Analysis, Data Mining, Signal Processing, Genetics, Linear Models etc. The Plenary Speakers were researchers recognized worldwide for their significant contributions in these areas. The conference provided a wonderful opportunity for researchers to discuss the directions of Statistical Research in the next decades and exchange ideas. The proceedings of the conference will be published in peer reviewed journals. The AFOSR grant made it possible to provide funds for the Plenary Speakers to participate in this Conference.					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF: Unclassified			17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES 4	19a. NAME OF RESPONSIBLE PERSON Dr. N. Kannan
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. TELEPHONE NUMBER (include area code) (210) 458-5691

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Final Conference Report

1. Introduction

An International conference **Statistics: Reflections on the Past and Visions for the Future** was held March 16-19, 2000 at the University of Texas at San Antonio. The conference was held to honor Professor C. Radhakrishna Rao on the occasion of his 80th birthday.

Professor C. R. Rao is recognized as one of the world's foremost creative thinkers in the field of Statistics, belonging to an elite group of researchers, who have shaped and influenced the direction that Statistical research has taken in this century. His work has influenced not only the field of Statistics, but disciplines such as the physical, social, and engineering sciences. His body of work is truly impressive for its depth and breadth, including fourteen books and over 300 research papers. Professor Rao has a long history with the AFOSR as Director of the Center for Multivariate Analysis which was established with funding from the agency.

The primary focus of the conference was to discuss the changing face of statistical research and highlight the contributions of Professor C. Radhakrishna Rao to the field of Statistics. The plenary sessions included talks in Statistical Genetics, Resampling techniques, Signal/ Image Processing, Generalized Linear Models, all areas of tremendous importance in the future.

The conference attracted over 200 participants from around the world. The grant from the AFOSR made it possible for the organizers to invite some of the leading researchers in the field. Plenary Speakers were provided with funds to cover local expenses. The conference was also funded by the National Science Foundation. The funds received from the NSF enabled us to invite young researchers and graduate students to participate in the conference.

2. Conference Program:

The 4-day conference featured talks on a variety of topics in Statistics and related fields of direct interest to the AFOSR. These included signal processing, wavelets, data mining, all areas that have been the focus of extensive research in the last decades. The list of Plenary Speakers included some of the most outstanding names in Statistics. Professor Herman Chernoff, Harvard University was the keynote speaker. A Panel Discussion on the future direction of Statistical Research was held as part of the conference program. The distinguished members of the panel were Professor R. Bradley, University of Georgia, Professor D. B. Rubin, Harvard University, and Professor H. Rubin, Purdue University. The list of Plenary Speakers who participated in the conference is given below:

- T. W. Anderson (Stanford)
- Barry C. Arnold (UC-Riverside)
- C.M.Cuadras (Univ. de Barcelona)
- Thomas Ferguson (UCLA)
- B. Roy Frieden (Univ. of Arizona)
- Yasunori Fujikoshi (Hiroshima Univ.)
- Alan E. Gelfand (Univ. of Connecticut)
- Peter Guttorp (Univ. of Washington)
- Samad Hedayat (Univ. of Illinois-Chicago)
- Abram Kagan (Univ. of Maryland)
- Thomas Kailath (Stanford)
- Adrienne Kemp (University of St. Andrews)
- Anant Kshirsagar (Univ. of Michigan)
- Kenneth L. Lange (UCLA)
- Bruce G. Lindsay (Penn State)
- Masatoshi Nei (Penn State)
- Michael Newton (Univ. of Wisconsin)
- E. Parzen (Texas A & M Univ.)
- G. P. Patil (Penn State)
- Nancy Reid (Univ. of Toronto)
- J. N. K. Rao (Carleton University)
- P. K. Sen (UNC-Chapel Hill)
- M. S. Srivastava (Univ. of Toronto)
- George P. H. Styan (McGill Univ.)
- Steven K. Thompson (Penn State)
- Helge Toutenburg (Universitt Munchen)
- S. R. S. Varadhan (Courant Institute)
- Edward C. Waymire (Oregon State University)

In addition to the Plenary Sessions, there were several Invited Sessions on a variety of topics in Statistical Theory and Applications. We have included the conference abstract book that contains the program, abstracts of talks presented, and the list of participants.

3. Location:

The conference was held March 16-19, 2000 at the University of Texas at San Antonio. The conference provided our students and faculty an exciting opportunity to meet and interact with leading researchers in the field of statistics. The University was enthusiastic in its support for this event, providing facilities at the downtown campus. The Division of Mathematics and Statistics, College of Sciences and Engineering, and the Office of the Provost also pledged their financial support toward the conference.

Announcements of the conference were sent to the major statistical association bulletins including the Amstat News and the IMS Bulletin. A web site devoted to the conference was

opened at the University of Texas at San Antonio site on the internet:

<http://www.math.utsa.edu/~kannan/conf>

4. Organizing Committee:

Chair: N. Kannan (University of Texas-San Antonio)

Committee Members:

- N. Balakrishnan (McMaster University)
- J. P. Keating (University of Texas-San Antonio)
- R. Khattree (Oakland University)
- T. Nayak (George Washington University)
- S. Peddada (University of Virginia).
- R. Tripathi, Local Organizer

5. Conference Proceedings:

Two premier journals have agreed to publish the proceedings of the conference. Conference participants were asked to submit their manuscripts which were then peer reviewed. The volumes are almost ready and we expect to send them to the publisher by June, 2001. Papers based on the Plenary Talks will appear in a special issue of *Sankhya* and the invited / contributed papers in *Communications in Statistics*. All articles have been peer reviewed according to the guidelines of the journals.

6. Conclusion

We believe that the conference was a great success with an outstanding list of participants. The conference provided a great opportunity for participants to present their work, and develop fruitful collaborations. Finally, we believe this was indeed a fitting tribute to Professor Rao who has made so many significant contributions to Statistical theory and Applications.